

REMARKS

Claims 91-93 have been cancelled so that claims 32, 34, 36-42, 44, 46, 48, 49, 51, 53 and 55-90 are now in the application.

Claims 32, 34, 36-42, 44, 46, 48, 49, 51, 53, 55-62 and 64-82 have been allowed.

Claim 48 is indicated as being allowed on page 2 of the Office Action, however, under item 5 on page 1 of the Office Action claim 48 was not included along with the other allowed claims.

Claims 63 and 83-90 were rejected under 35 USC 112, second paragraph, as being indefinite. In regard to claim 63 the Examiner stated it was not clear how angle β can be recited as being zero and have a plane. Claim 63 has been amended to delete the reference to angle β so that the last subparagraph recites:

"the pinned and spacer layers being ion beam sputtered at only said angle α ."

This structure is supported by Applicant's specification, page 16, lines 1-7, which state:

"Example 2

Example 500, shown in Fig. 17, is the same as Example 400 shown in Fig. 16 except the layers 424, 422 and 426 of the free layer structure 406 were obliquely ion beam sputter deposited at a sputtering angle $\alpha = 40^\circ$ and a sputtering angle $\beta = 20^\circ$ while the remainder of the layers were ion beam sputter deposited at a sputtering angle $\alpha = 40^\circ$ and sputtering angle $\beta = 0^\circ$ of 90° . After conducting tests the magnetoresistive coefficient dr/R was 6.56%, . . ."

As shown in Fig. 17, the free layer structure 406 is ion beam sputter deposited at angles α and β wherein angle α is 40° and angle β is 20° . Further, Fig. 17 shows the pinned layers 410, 412, 408 and 414 and the spacer layer 402 being ion beam sputter deposited at only an angle α of 40° .

Each of claims 83 and 88 were rejected on the basis that it is not clear how angle β can have a plane and angle β is 0. Claim 83 has been amended to delete the recitation to angle β as being zero so that the last subparagraph, as amended, reads:

"the pinned and spacer layers being ion beam sputtered at only said angle α ."

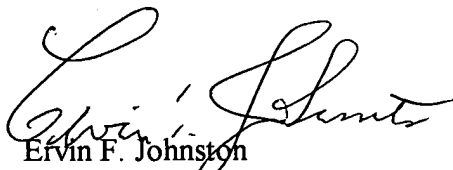
Claim 88 has been amended to delete the recitation of angle β as being zero so that claim 88 now recites:

"wherein for the pinned and spacer layers angle α is 40° ."

Support for these amendments is the same as the support given for claim 63 hereinabove. Because of the amendments to claims 83 and 88, claims 84-90, which are dependent upon claim 83, should now be in condition for allowance.

Should the Examiner have any questions regarding this document he is respectfully requested to contact the undersigned.

Respectfully submitted,

By: 
Ervin F. Johnston
Attorney for Applicant(s)
Registration No. 20,190
Telephone: 619-334-5883
Fax: 619-448-1904